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# Content Analysis of Engineering College Library Websites in Goa

Dr. Jayaprakash G. Hugar Dr.
*Dnyanprassarak Mandal's College and Research Centre, Assagao, Mapusa, Goa*, dmclibrarian@rediffmail.com

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**Dr. Jayaprakash G Hugar**

## Abstract

ICT- led developments have created new opportunities and challenges for libraries in creation, promotion, dissemination and storage of information. Engineering College libraries are nowadays using the web environment to provide high-quality information for their users, mostly in digital format. The current study investigates and presents the content analysis of Goa University affiliated engineering college library websites in Goa. The data was collected from the websites of the concerned engineering college libraries through a checklist prepared for this purpose. The websites of the libraries were thoroughly scanned and analyzed, based on the analysis we have ranked them. The main purpose of this paper is to guide the librarians in improving their library websites. There is a need to design and develop a unique type of library websites containing resources and services of their individual libraries and also providing links to other IIT libraries. This article gives a detailed account of the study and offers suggestions for developing and managing better library websites.

**Keywords:** Content analysis, Websites, libraries, Engineering Colleges, Web based library services.

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*Dr. Jayaprakash, Librarian, Dnyanprassarak Mandal's College and Research Centre, Assagao, Bardez, Goa – 403 507. Email: dmclibrarian@rediffmail.com, ORCID: https://orcid.org/0000-0001-8307-5582

## 1. Introduction

In the present era, the website is considered as the most popular medium to catch the recent updates therefore, every institution has its own website that is used for imparting valuable information to the targeted users. In an academic institution, the library is known as a knowledge resource centre where its users gather information from various information sources as per their information needs. Today, students can ask reference questions online, perform research in databases, inter-library loan requests through online, and find academic articles electronically (Connell, 2008).

The library website is part of the public image of the library, therefore, library website can be a mirror of the library which shows its collection, services, facilities, communication media and other information. (Sangeeta Dhamdhere N)

Dr. Sudharma Haridasan and Mohammed Uwesh explained that the content and its presentation is the most important part of any website. The various web-based library services include a web-based table of contents, article alert service, electronic article delivery, open J-gate and index to journal articles. Other web-based library services, includes online staff lists, online suggestion forms, online library news, online library holidays lists, online in-house library bulletins, web-based user education/virtual library tours, online integrated push-based services (e-mail based), online helpdesk services/Ask-a-librarian, e-mail-based services, online library chat, library forums (e-mail based), web-based FAQ, library blogs, library wiki, online contact address, online subject gateways, online mailboxes for user comments or suggestions, change password online, online general library policies, information about special exhibits, web-based library tutorials, and online map of the library.

Content analysis involves establishing categories, systematic linkages between them and then counting the number of instances when those categories are used in a particular item of text, for instance, a newspaper report. Because it is a very familiar method in quantitative research, it is important to distinguish how content analysis is used in qualitative studies.

Content analysis is an accepted method of textual investigation, particularly in the field of mass communications. In content analysis, researchers establish a set of categories and then count the number of instances that fall into each category. The crucial requirement is that the categories are sufficiently precise to enable different coders to arrive at the same results when the same body of material (e.g. newspaper headlines) is examined (see Berelson, 1952). In this

way, content analysis pays particular attention to the issue of the reliability of its measures – ensuring that different researchers use them in the same way - and to the validity of its findings – through precise counts of word use (see Selltiz et al., 1964: 335-42).

## 2. Engineering Colleges in Goa

### 2.1 Goa College of Engineering, Ponda

This is the first engineering college in the state of Goa, established in the year 1967 with undergraduate courses in Mechanical, Civil, and Electrical Engineering. The Electronics and Telecommunication course was introduced in 1982, Computer Science in 1988, Information Technology in 2001 and Mining in 2011. All courses in the college are affiliated to Goa University. It currently has nine master's degree programmes, in different subjects the duration of each being two years.

The college is recognized as a research institute under Goa University. The affiliation to PhD programs in Civil, Mechanical, Electrical & Electronics, Computer Science & Engineering and Electronics & Telecommunication Engineering is recognized from the academic year 2014–15 onwards.

### 2.2 Padre Conceicao College of Engineering, Pilar

Padre Conceicao College of Engineering was established by the Agnel Ashram Fathers (Members of the society of St. Francis Xavier, Pilar) in the Year 1997 with a Noble cause of providing Quality Education in the Technical Field. PCCE is the first private engineering college in Goa. It offers Computer Science Engineering, Electronic and Telecommunication Engineering, Mechanical Engineering, Information Technology Engineering courses in BE, and a Master's degree in Information Technology.

### 2.3 Shree Rayeshwar Institute of Engineering and Information Technology, Shiroda

Shree Rayeshwar Institute of Engineering and Information Technology (SRIEIT), popularly known as RIT Shiroda, is an All India Council for Technical Education (AICTE) approved, private engineering college affiliated to Goa University, located in Shiroda, Goa. College is established in 2001, it is one of the private engineering colleges in the state of Goa and awards the Bachelor of Engineering or BE degree. The institution consists of three

academic departments. It offers Electronics and Telecommunication Engineering, Information Technology and Computer Science Engineering courses at the UG level only.

### 2.4 Don Bosco Engineering College, Fatorda

Don Bosco College of Engineering is an institute of technical education established in 2011 in Fatorda, Goa, and is run by the Fatorda Salesian Society. The college is affiliated with Goa University and approved by the AICTE. It offers B.E. Civil Engineering, Computer Engineering, Electronics & Telecommunication Engineering, and Mechanical Engineering.

### 2.5 Agnel Institute of Technology and Design, Assagao

Agnel Institute of Technology and Design, Assagao is a private and self-financed Engineering College established in the year 2012. The Institute is a part of technical education complex of Agnel Ashram Fathers who have established Engineering College and other colleges in various parts of India. The institute is approved by All India Council of Technical Education, New Delhi, recognized by Government of Goa and is affiliated to Goa University. The Institute offers three Bachelor of Engineering programmes (B.E) i.e.:- Mechanical Engineering, Electronics and Communication Engineering and Computer engineering.

## 3. Review of Literature

**Abubakar Mohammed, Aminu Garba and Hafiz Umar (2016)** studied the university library websites in Nigeria and analysed their content so as to ascertain their strength and weaknesses, and to give recommendations. Ten university libraries with functional websites were randomly selected for the study. Based on previous studies, 43 item checklists were developed and critical examination of standard library websites was carried out. The study also established general information about the library, library services and their physical holdings as inadequate. Recommended for improvement of librarians' skills in website development and enhancement of library curriculum in library schools to include website development, among others. **Singh, M.P and Virendra Kumar Gautam (2016)** conducted a survey on content analysis of central university library websites of Delhi. The study shows that maximum library websites are well developed and designed to enrich with e-resources. In this study, it is revealed that Jawaharlal Nehru University library website is the best and South Asian University library website is worst according to evaluation criteria. Through this study, researchers found that Jawaharlal Nehru University library websites provide the best products and services than other

central university library websites in Delhi. **Manoj Kumar Verma and Ksh. Krishna Devi (2015)** carried out the study and analysed the contents available in the library webpage of the Central Universities of the North Eastern States in India. The study is based on the information available in the library webpage of the concerned universities. A checklist was designed and the library web pages were evaluated based on the previous evaluations of websites conducted by different authors. It is also observed in the study that there are universities which have a very few web pages and information available. Further, it is observed that there are also some universities whose library links are not working. **Sarwesh Pareek and Dinesh K Gupta (2013)** investigated 52 academic library websites including government, deemed self-financed universities and research centre libraries of Rajasthan based on the 133-item checklist. To analyse their content and navigational strengths and weaknesses and gave recommendations for developing better websites and quality assessment studies. They identified the main criteria for qualifying for a library website is adequate language; clear structure; options for different user groups; all information up-to-date and short, concise information. The best preparation for creating a Website is for library staff to spend some time by surfing the Websites of similar libraries or organizations. **Mohamed Haneefa K and Anjana Venugopal M K (2010)** analysed twenty-eight out of thirty-seven national library websites that are in English language in Asia. They analysed general information about the library, its collection, services, information on e-resources, application of web 2.0 technology and found that the majority of the national library websites in Asia provide informative links to contacts, copyright, news and events, there is enormous scope for improving the websites. Concluded by saying if a national library website is more attractive and informative, it can easily capture the attention of library users and web surfers. **Vijayakumar M., Kannappanavar B.U. and Mamata Mestri (2009)** found that Indian Institutes of Technology are identified as premier institutes of higher education and research in Technology in India. Having a common goal, there is a need for cooperation among the libraries of the IITs. To achieve this kind of co-operation, there is a need to design and develop a unique type of library portals containing resources and services of their individual libraries and also providing links to other IIT libraries. Further, they reported that there is also a need to form an educational network specialized among the IIT libraries. **Kanamadi, Satish and Kumbhar B D (2006)** in their article on "Web-Based Services Expected from Libraries: A Case Study of Management Institutes in Mumbai City" discussed the library portals and the web-based library services expected at management institutes in Mumbai City. The study conducted to check the availability of institutional library website. This study shows that the no more students are interested in the library website. Because

inadequate and static information being made available on their library websites. This study also shows the expected services by users on library websites to access through the Internet at their convenience. **Margam, Madhusudhan (2012)** evaluated the content features of selected library websites of Indian Institutes of Technology (IITs) in India and uses a mixed-method approach that combines both quantitative and qualitative analyses of IIT library websites evaluation with the help of a specially designed checklist. The various content features of the websites of twelve IIT libraries are evaluated. The author revealed that the websites are lagging behind in exploiting the full potential of web/ library 2.0 features. Further, he said, IIT library websites in India are ranked above average mainly providing general information of the library and their services and resources. The highest scored study IIT library website is IIT Madras with 78.88 per cent (71/ of 90) and least scored study website is IIT- Gandhinagar with 33.33 per cent (30/90).

It is clear from the above reviews that few studies are conducted on the content analysis, evaluation and use of the library websites. Similar studies of the engineering colleges in western India was not conducted. So it is useful to conduct this type of study to develop more meaningful library websites in this region.

## 4. Scope of the Study:

The present study covers all the engineering colleges located in Goa state and affiliated to Goa Technical Education and Goa University, Goa. Among these two are the old colleges whereas three are the newly established colleges including government (one) and private (four) engineering colleges.

## 5. Objectives of the study:

The main objective of this study is:

- To analyze and examine the current content status provided in the Library Websites of Engineering colleges in the state of Goa.
- To know which engineering college library website provides better services than other engineering college libraries;
- To find out the resources, services and facilities available on the library websites and;
- To suggest measures for the improvement of college library websites.

- To examine the additional features of library websites.

## 6. Methodology:

The data was collected from the engineering college library websites and for the purpose of collection of data a checklist was prepared. The checklist was prepared on the basis of earlier studies conducted by different authors. For content analysis, the information given on each website was scanned thoroughly during December 2018. The collected data was presented in tabular and graphical form.

## 7. Data Analysis and Interpretation:

### 7.1 Year of Establishment of Engineering Colleges

Table No. 1
Year of Establishment of the Engineering Colleges

| Name of the Colleges | Year of Establishment | Website Address |
|---|---|---|
| Goa College of Engineering, Ponda | 1967 | www.gec.ac.in/Deptindex.aspx?page=a&ItemID=193&nDeptID=46 |
| Padre Conceicao College of Engineering, Pilar | 1997 | www.pccegoa.org/amenities/Library |
| Shree Rayeshwar Institute of Engineering and Information Technology, Shiroda | 2001 | www.ritgoa.ac.in |
| Don Bosco College of Engineering, Fatorda | 2011 | www.dbcegoa.ac.in/about-library/ |
| Agnel Institute of Technology and Design | 2012 | www.aitdgoa.edu.in/library |

The above mentioned different engineering college library websites are analysed for the study purpose. Goa College of Engineering, Ponda is the oldest and only the Government College in Goa. Remaining engineering colleges are private engineering colleges imparting engineering education in Goa.

Padre Conceicao College of Engineering was established in the year 1997, after a gap of four years, in the year 2001 Shree Rayeshwar Institute of Engineering and Information Technology, Shiroda started. Recently in the year 2011, Don Bosco College of Engineering and Agnel Institute of Technology and Design is established in 2012.

## 7.2 Basic information of the engineering colleges

**Table No. 2**

| Sl. No. | Website Content | AITD | PCCE | DBEC | SRIEIT | GEC |
|---|---|---|---|---|---|---|
| 1. | About the Library | Y | Y | Y | Y | Y |
| 2. | Contact information | Y | Y | Y | - | Y |
| 3. | FAQ's | N | - | Y | - | - |
| 4. | Library committee | - | Y | - | - | - |
| 5. | Library news and events | - | - | - | - | - |
| 6. | Library Organization and floor plan | Y | - | - | - | - |
| 7. | Library rules | - | Y | - | - | - |
| 8. | Library Staff | Y | Y | Y | - | Y |
| 9. | Library Timings | Y | Y | Y | - | Y |
| 10. | Membership details | - | - | Y | - | - |
| 11. | Mission and Vision Statement | Y | - | Y | - | - |
| 12. | Photo's | Y | - | Y | - | Y |
| 13. | Staff Directory | Y | - | | - | Y |

| | | | | | |
|---|---|---|---|---|---|
| **Total Score (Max. 13)** | **8 (61.53%)** | **6 (46.15%)** | **8 (61.53%)** | **1 (7.69%)** | **6 (46.15%)** |

The libraries' websites are varied in nature, coverage of content, and manner of displaying information and others. Table 2 reveals the basic information available in the library websites. It shows that all five websites of the engineering college libraries were provided information About the Library and contact information except Shree Rayeshwar Institute of Engineering and Information Technology. While Agnel Institute of Technology and Design and Don Bosco Engineering College websites provided majority 61.53% of the basic information, Whereas, Padre Conceicao College of Engineering and Goa Engineering College library websites provided 46.15% of the information, Shree Rayeshwar Institute of Engineering and Information Technology provided very less information on their library website.

### 7.3 Sections of the Library

**Table No. 3**

| **Sl. No.** | **Website Content** | **AITD** | **PCCE** | **DBEC** | **SRIEIT** | **GEC** |
|---|---|---|---|---|---|---|
| 1. | Circulation section | Y | Y | - | - | Y |
| 2. | Digital library section | Y | Y | - | - | Y |
| 3. | Journal Section | Y | - | - | - | - |
| 4. | Reference Section | Y | Y | - | - | Y |
| 5. | Stack Section | - | Y | - | - | - |
| **Total (Max. 5)** | | **4 (80%)** | **4 (80%)** | **0** | **0** | **3 (60%)** |

Table No. 3 provides information about the availability of different sections in the library in their library websites. Both the Private Engineering colleges i.e.: AITD and PCCE are provided 80% and GEC provided 60% information about the availability of different sections in the library. DBCE and SRIEIT colleges have not provided any information about these sections in their library website.

### 7.4 Library Collection

**Table No. 4**

| Sl. No. | Website Content | AITD | PCCE | DBEC | SRIEIT | GEC |
|---|---|---|---|---|---|---|
| 1. | Book Bank Facility/collection | - | Y | Y | - | Y |
| 2. | CD/DVD's | Y | - | - | - | Y |
| 3. | Library collection | - | Y | Y | Y | Y |
| 4. | New Arrivals | Y | - | - | - | - |
| 5. | Printed journals information | Y | Y | Y | - | - |
| 6. | Question papers | Y | - | - | - | Y |
| **Total (Max. 6)** | | **4 (66.66%)** | **3 (50%)** | **3 (50%)** | **1 (16.66%)** | **4 (66.66%)** |

Engineering college libraries are having a different type of printed and online library collection. Table No. 4 describes the library collection information in their college library websites. In this study, AITD and GEC College websites provided 66.66% information, followed by PCCE and DBCE college websites provided 50% information about their library collection. 80% of the colleges mentioned about the library collection, 60% of the websites informed about the Book Bank facility and printed journals information on their respective college library websites.

### 7.5 Electronic resources

**Table No. 5**

| Sl. No. | Website Content | AITD | PCCE | DBEC | SRIEIT | GEC |
|---|---|---|---|---|---|---|
| 1. | e-books | Y | - | Y | - | Y |
| 2. | e-journals | Y | Y | Y | Y | Y |
| 3. | e-thesis | - | - | - | - | Y |

| | | | | | | |
|---|---|---|---|---|---|---|
| 4. | Links to AICTE digital library consortia | Y | Y | - | - | Y |
| 5. | Links to e-books & e-journals | Y | Y | - | - | - |
| 6. | Links to e-databases | Y | - | - | - | - |
| 7. | Links to institutional repository | Y | - | - | - | - |
| 8. | Links to other reference websites | Y | - | - | - | Y |
| 9. | Web-based OPAC | Y | Y | - | - | Y |
| **Total (Max. 9)** | | **8 (88.88%)** | **4 (44.44%)** | **2 (22.22%)** | **1 (11.11%)** | **6 (66.66%)** |

E-resources are important in these days because of the easy availability of the Internet, and skills to access it. Table No. 5 describes the accessibility of electronic resources in their college library websites. In this study, majority i.e.: 89% information about the e-resources is provided by the AITD college library website, followed by GEC, PCCE, DBEC and SRIEIT with 67%, 44%, 22% and 11% respectively. Almost all the engineering college library websites informed about the accessibility of e-journals. Only AITD provided information about the availability of links to databases, institutional repositories.

### 7.6 Library Services

**Table No. 6**

| Sl. No. | Website Content | AITD | PCCE | DBEC | SRIEIT | GEC |
|---|---|---|---|---|---|---|
| 1. | Circulation service | - | Y | Y | - | - |
| 2. | Current Awareness Service | - | Y | Y | - | - |
| 3. | DELNET service | Y | Y | - | Y | Y |
| 4. | Downloads | Y | - | - | - | Y |

| | | | | | | |
|---|---|---|---|---|---|---|
| 5. | ILL / Document Delivery Service | - | Y | - | - | - |
| 6. | Library Service | - | Y | Y | - | - |
| 7. | Online e-mail alert service | - | Y | - | - | - |
| 8. | Reference Service | - | Y | - | - | - |
| 9. | Reprographic facility | Y | Y | - | - | - |
| **Total (Max. 9)** | | **3 (33.33%)** | **8 (88.88%)** | **3 (33.33%)** | **1 (11.11%)** | **2 (22.22%)** |

Table No.6 shows the library services in engineering college library websites. The libraries' web pages provided different types of services for their intended users, but the extent of such offerings also varied. Most libraries provided basic library services, such as DELNET service. Majority 89% of the library services are mentioned by PCCE library website, followed by AITD and DBEC with 33%, GEC with 22% information. Very meagre information is provided by SRIEIT with 11%. It shows that still, respective college librarians have to provide more information about the library services in their library websites.

Except for PCCE, all other college library websites are below the average level in providing information about the library services in their respective library websites.

### 7.7 Value Added Services

**Table No. 7**

| Sl. No. | Website Content | AITD | PCCE | DBEC | SRIEIT | GEC |
|---|---|---|---|---|---|---|
| 1. | Web research guides | - | - | - | - | - |
| 2. | Web counter | - | - | - | - | - |
| 3. | Website updated date | - | - | - | - | - |

| | | | | | | |
|---|---|---|---|---|---|---|
| 4. | Citation style guides & tools | - | - | - | - | - |
| 5. | Online feedback facility | Y | - | Y | - | - |
| Total **(Max. 5)** | | 1 **(20%)** | 0 | 1 **(20%)** | 0 | 0 |

Table No. 7 reports information about the Value Added Services available in the Engineering college library websites. It shows that, only 20% of the information is provided by two private engineering colleges in the study area, remaining colleges are not attempted to put this valuable information on their respective college library websites. Since Goa College of Engineering is having research centre, their college library website should have at least web research guides.

### 7.8 Ranking of Engineering College Library Website

**Table No. 8**

| **Engineering College Websites** | **Basic information** | **Sections in the Library** | **Library Collection** | **Electronic Resources** | **Library Services** | **Value Added Services** | **Total Score (out of 47)** | **Rank of Website** |
|---|---|---|---|---|---|---|---|---|
| AITD | 8 | 4 | 4 | 8 | 3 | 1 | **28** | **1** |
| PCCE | 6 | 4 | 3 | 4 | 8 | 0 | **25** | **2** |
| GCE | 6 | 3 | 4 | 6 | 2 | 0 | **21** | **3** |
| DBCE | 8 | 0 | 3 | 2 | 3 | 1 | **17** | **4** |
| SRIEIT | 1 | 0 | 1 | 1 | 1 | 0 | **04** | **5** |
| **Total** | **29** | **11** | **15** | **21** | **17** | **2** | **95** | |

Table No. 8 gives information about the overall ranking of the engineering college library websites during the study period. It is known from the study that, AITD provided maximum information in their library website with the overall score of 28 and stood 1st rank among the five engineering colleges in Goa state. Followed by PCCE and GCE with 25 and 21 points respectively. Very meagre information is provided by the Shree Rayeshwar Institute of Engineering and Information Technology, Shiroda.

Among the contents of the various engineering college library websites, Basic information is provided by majority of the colleges followed by electronic resources and library services. Very less information is provided on value added services and various sections of the library.

### 7.9 Ranking study of engineering college library websites in Goa

**Table No. 9**

| **Engineering College Library Website** | **Total Score** | **Rank** |
|---|---|---|
| Agnel Institute of Technology and Design | 28 | Above Average |
| Padre Conceicao College of Engineering, Pilar | 25 | Average |
| Goa College of Engineering, Ponda | 21 | Average |
| Don Bosco College of Engineering, Fatorda | 17 | Below Average |
| Shree Rayeshwar Institute of Engineering and Information Technology, Shiroda | 04 | Needs Improvement |

A quantitative five-point rating scale was designed to determine the evaluation checklist whether or not it effectively served its intended dual purpose i.e. to provide a meaningful numerical rating for each individual feature of the engineering college library website and to aid in distinguish quality among the engineering college library websites with similar information content. Its purpose is best served when comparing and ranking the engineering college library websites with similar purpose, scope, and content to rank from “excellent” to

"needs improvement". The five points rating scale was fixed equally based on the maximum score of 47 quantitative evaluation points. The range for the rating scale was as follows:

The range for the rating scale is as follows: P 40–49: Excellent, P 30–39: Above Average, P 20–29: Average, P 10–19: Below Average, P 01–09: Needs Improvement.

A cursory glance at Table 9 reveals that out of 5 study libraries, none of the libraries website had ranked "Excellent". All the study websites were ranked with "Above average, Average, Below average and Needs Improvement", of which Agnel Institute of Technology, Assagao got highest total score of 28 out of 47 (60%), followed by Padre Conceicao College of Engineering, Pilar with 25 score (53%). Interestingly, Shree Rayeshwar Institute of Engineering and Information Technology, Shiroda which was established 18 years ago, got lowest total score with 04 (8%). The rating system proved to be an efficient and effective means of representing data collected in each part of the instrument. The ranking table was especially helpful in bringing together all of the individual scores and then in generating a final composite rating.

## 8. Findings:

1. It shows that all five websites of the engineering college libraries were provided information About the Library and contact information except Shree Rayeshwar Institute of Engineering and Information Technology.
2. Both the Private Engineering colleges i.e.: AITD and PCCE are provided 80% and GEC provided 60% information about the different sections available in the library.
3. 80% of the colleges mentioned about the library collection, 60% of the websites informed about their Book Bank facility and printed journals information.
4. Almost all the engineering college library websites informed about the accessibility of e-journals.
5. Most libraries provided basic services, such as DELNET service. Majority 89% of the library services are mentioned by PCCE library website, followed by AITD and DBEC with 33%, GEC with 22% information.
6. Only 20% of the information is provided by two private engineering colleges in the study area, remaining colleges are not attempted to put this valuable information on their respective college library websites.

7. In the Goa College of engineering, there is no update date is available in their website.
8. AITD provided maximum information in their library website with the overall score of 28 and stood 1st rank among the five engineering colleges in Goa state.
9. Out of five libraries, none of the libraries website had ranked "Excellent".
10. In the library website of Don Bosco College of Engineering college, About the library section shows that, the library has over 9410 books 1345 titles, where as it shows 7985 books and 934 titles in the book collections section under the Services heading. The Library data is of two year old. Department wise facts and figures mentioned under the library collection section is of the year 2015-16, it has to be updated.
11. PCCE library website is connected to the main college website under amenities. But there is no photos of different sections of the library.
12. News and Events, Circulars and Notices of the college are inserted in the library website of AITD. They have mentioned lending section (actually it is their stack section) and circulation section. They are having separate technical processing section for processing reading materials. National Librarian Day photos, book exhibition photos can be seen on the library website. Specialty of this website is Seeds of Wisdom, where one small inspirational story is written.

## 9. Suggestions:

1. Library websites should focus attention to fulfill the information seeking needs of the users rather than providing general or administrative information.
2. As most of the websites managing in static mode, urgent efforts should be made to maintain them in dynamic mode with content management system. These web sites were often developed as a routine organizational matter instead of a conscious process of library promotion and marketing.
3. Regular updating of the websites is a major problem to be addressed by the librarians.
4. In accordance with international standards and practices, AICTE should mandate engineering college libraries to frame minimum facilities to be provided in the websites.
5. Continuing education programmes for working librarians may be organised in this line.
6. It is suggested to have a dedicated team to look after the library website and update it at regular interval.

## 10. Conclusion:

The study reveals that the library websites can provide a lot of services to the users, especially to the remotely located persons. It is observed in the present study that all the library webpages are different among themselves in many ways.

The present paper comprehends the contents of the websites of engineering college libraries. The websites are the mirror of the services and facilities provided by the libraries. The updating of library websites is very necessary to provide correct and accurate information to the users and to save their time and energy (Astani and Elhindi, 2008).

User friendliness of website is very necessary that will increase the usefulness and access of the library websites. The librarians need to adapt to the new environment, more dynamic and dedicated websites are needed to serve the users in more effective and efficient manner. User feedback and comparison of library websites with other websites is very necessary for the continuous development of the effective library websites. If an engineering college library website is more attractive and informative, it can easily capture the attention of library users.

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